

Copenhagen, Denmark; June 2, 2010 – Pursuant to Section 28a of the Danish Securities Trading Act, Genmab A/S (OMX: GEN) shall make public information on transactions by managerial employees and their related parties involving Genmab shares and related instruments, as follows:

Name: Michael B. Widmer

Reason: Member of the Board of Directors

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 15,000 Value: DKK 377,250

Name: Anders Gersel Pedersen

Reason: Member of the Board of Directors

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 7,500 Value: DKK 188,625

Name: Karsten Havkrog Pedersen

Reason: Member of the Board of Directors

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 7,500 Value: DKK 188,625

Genmab A/S Tel: +45 7020 2728 Bredgade 34 Fax: +45 7020 2729 1260 Copenhagen K, Denmark CVR no. 2102 3884 Stock Exchange Release no. 21/2010

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Name: Burton G. Malkiel

Reason: Member of the Board of Directors

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 7,500 Value: DKK 188.625

Name: Hans Henrik Munch-Jensen

Reason: Member of the Board of Directors

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 7,500 Value: DKK 188,625

Name: Nedjad Losic

Reason: Member of the Board of Directors

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 7,500

Value: DKK 188,625

Name: Tom Vink

Reason: Member of the Board of Directors

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 7,500 Value: DKK 188,625

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Name: Daniel Bruno

Reason: Member of the Board of Directors

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 7,500 Value: DKK 188,625

Name: Lisa N. Drakeman

Reason: President, Chief Executive Officer and member of the Board of Directors

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 120,000 Value: DKK 3.018.000

Name: Jan G. J. van de Winkel

Reason: President, Research & Development and Chief Scientific Officer

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 70,000

Value: DKK 1,760,500

Name: David A. Eatwell

Reason: Chief Financial Officer

Issuer: Genmab A/S

ID code/ ISIN: DK0010272202

Description: Warrants Transaction: Grant

Trading date: June 2, 2010

Market: NASDAQ OMX Copenhagen A/S

Number: 70,000

Value: DKK 1,760,500

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 1260 Copenhagen K, Denmark
 CVR no. 2102 3884

The exercise price for each warrant is DKK 46.74. Each warrant entitles the owner to subscribe one share of nominally DKK 1. On the basis of an exercise price of DKK 46.74 and by application of the Black-Scholes formula, the average value of each warrant can be calculated as DKK 25.15 based on an interest rate of 2.55% and the historical volatility of Genmab A/S shares calculated at 59.63%.

About Genmab A/S

Genmab is a leading international biotechnology company focused on developing fully human antibody therapeutics for the potential treatment of cancer. Genmab's world class discovery and development teams are using cutting-edge technology to create and develop products to address unmet medical needs. Our primary goal is to improve the lives of patients who are in urgent need of new treatment options. For more information on Genmab's products and technology, visit www.genmab.com.

This Stock Exchange Release contains forward looking statements. The words "believe", "expect", "anticipate", "intend" and "plan" and similar expressions identify forward looking statements. Actual results or performance may differ materially from any future results or performance expressed or implied by such statements. The important factors that could cause our actual results or performance to differ materially include, among others, risks associated with product discovery and development, uncertainties related to the outcome and conduct of clinical trials including unforeseen safety issues, uncertainties related to product manufacturing, the lack of market acceptance of our products, our inability to manage growth, the competitive environment in relation to our business area and markets, our inability to attract and retain suitably qualified personnel, the unenforceability or lack of protection of our patents and proprietary rights, our relationships with affiliated entities, changes and developments in technology which may render our products obsolete, and other factors. For a further discussion of these risks, please refer to the section "Risk Management" in Genmab's Annual Report, which is available on www.genmab.com. Genmab does not undertake any obligation to update or revise forward looking statements in this Stock Exchange Release nor to confirm such statements in relation to actual results, unless required by law.

 $Genmab\ ^{\$};\ the\ Y-shaped\ Genmab\ logo\ ^{\$};\ HuMax-CD20\ ^{\$};\ HuMax-EGFr^{TM};\ HuMax-IL8^{TM};\ H$ TACTM; HuMax-HepCTM; HuMax-CD38TM; HuMax-CD32bTM; HuMax-TFTM; HuMax-Her2TM; HuMax-VEGFTM; HuMax-Wnt; HuMax-cMetTM and UniBody[®] are all trademarks of Genmab A/S. Arzerra[®] is a trademark of GlaxoSmithKline.

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